

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A regulatable aptazyme oligonucleotide comprising a Group I intron oligonucleotide and an aptamer oligonucleotide, wherein the kinetic parameters of the Group I intron oligonucleotide vary in response to the interaction of an allosteric effector molecule with the aptamer oligonucleotide.
2. (Previously Presented) The regulatable aptazyme of claim 1, wherein the aptamer comprises RNA.
3. (Previously Presented) The regulatable aptazyme of claim 1, wherein the aptamer comprises DNA.
4. (Previously Presented) The regulatable aptazyme of claim 1, wherein the aptazyme is at least partially single stranded.
5. (Previously Presented) The regulatable aptazyme of claim 1, wherein the aptazyme is at least partially double stranded.
6. (Cancelled)
7. (Currently Amended) The A regulatable aptazyme of claim 1, oligonucleotide comprising a Group I intron oligonucleotide and an aptamer oligonucleotide, wherein the kinetic parameters of the Group I intron oligonucleotide vary in response to the interaction of an allosteric effector molecule with the aptamer oligonucleotide and wherein the aptazyme comprises the oligonucleotide sequence of SEQ ID NO: 2: GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TTA TAC CAG CAT CGT CTT GAT GCC CTT GGC AGA TAA ATG CCT AAC GAC TAT CCC

TT or an oligonucleotide sequence that hybridizes under stringent conditions to a hybridization probe the nucleotide sequence of which comprises the sequence of SEQ ID NO: 2 or an oligonucleotide that is complementary or antisense to such a probe.

8. – 11. (Cancelled)

12. (Previously Presented) The regulatable aptazyme of claim 1, wherein the effector molecule is endogenous.

13. (Previously Presented) The regulatable aptazyme of claim 1, wherein the effector molecule is exogenous.

14. (Previously Presented) The regulatable aptazyme of claim 1, wherein the effector molecule comprises theophylline.

15. (Previously Presented) An allosterically regulatable aptazyme oligonucleotide comprising a Group I intron oligonucleotide and an aptamer oligonucleotide, wherein the kinetic parameters of the Group I intron oligonucleotide vary in response to the interaction of an allosteric effector molecule with the aptamer oligonucleotide and the intron splicing reaction occurs *in vitro*.

16. (Previously Presented) The allosterically regulatable aptazyme of claim 15, wherein the aptamer oligonucleotide comprises RNA.

17. (Previously Presented) The allosterically regulatable aptazyme of claim 15, wherein the aptamer oligonucleotide comprises DNA.

18. (Previously Presented) The allosterically regulatable aptazyme of claim 15, wherein the aptazyme is at least partially single stranded.

19. (Previously Presented) The allosterically regulatable aptazyme of claim 15, wherein the

aptazyme is at least partially double stranded.

20. (Cancelled)

21. (Currently Amended) ~~The A~~ allosterically regulatable aptazyme of claim 15,
oligonucleotide comprising a Group I intron oligonucleotide and an aptamer oligonucleotide,
wherein the kinetic parameters of the Group I intron oligonucleotide vary in response to the
interaction of an allosteric effector molecule with the aptamer oligonucleotide and wherein said
aptazyme comprises the oligonucleotide sequence of SEQ ID NO: 2: GCC TGA GTA TAA GGT
GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC
CGT GCT AAA TTA TAC CAG CAT CGT CTT GAT GCC CTT GGC AGA TAA ATG CCT
AAC GAC TAT CCC TT or an oligonucleotide sequence that hybridizes under stringent
conditions to a hybridization probe the nucleotide sequence of which comprises the sequence of
SEQ ID NO: 2 or an oligonucleotide that is complementary or antisense to such a probe.

22.-25. (Cancelled)

26. (Previously Presented) The allosterically regulatable aptazyme of claim 15, wherein the
effector molecule is endogenous.

27. (Previously Presented) The allosterically regulatable aptazyme of claim 15, wherein the
effector molecule is exogenous.

28. (Previously Presented) The allosterically regulatable aptazyme of claim 15, wherein the
effector molecule comprises theophylline.